

Title (en)  
Metal casting apparatus, cast work piece and method thereof

Title (de)  
Metallgießvorrichtung, Gusswerkstück und Verfahren dafür

Title (fr)  
Appareil de coulée de métal, pièce moulée et procédé associé

Publication  
**EP 2589447 B1 20200923 (EN)**

Application  
**EP 12190434 A 20121029**

Priority  
US 201113290667 A 20111107

Abstract (en)  
[origin: EP2589447A2] A metal casting apparatus (20) includes a feeder (22) for providing a molten metallic material. A mold (26) includes a sprue (28) and a component cavity (30). The sprue (28) is arranged to receive the molten metallic material from the feeder (22) and the component cavity (30) is arranged to receive the molten metallic material from the sprue (28). A starter (32) is arranged adjacent the component cavity (30) and is operable to induce a first grain orientation upon solidification of the molten metallic material. The sprue (28) includes an aborter (34) that is arranged to induce a second grain orientation upon solidification of the molten metallic material.

IPC 8 full level  
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CPC (source: EP US)  
**B22C 9/082** (2013.01 - EP US); **B22D 18/04** (2013.01 - EP US); **B22D 27/045** (2013.01 - EP US); **C30B 21/02** (2013.01 - EP US); **C30B 28/06** (2013.01 - EP US); **C30B 29/52** (2013.01 - EP US); **Y10T 428/12389** (2015.01 - EP US)

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